

ANALYTICAL REPORT

Lab Number: L1714882

Client: EQ Northeast, Inc.

185 Industrial Road

P.O. Box 617

Wrentham, MA 02093

ATTN: Michael Sciola Phone: (508) 384-6151

Project Name: TRAIN WASH SAMPLE BLANKS

Project Number: Not Specified Report Date: 05/16/17

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: TRAIN WASH SAMPLE BLANKS

Project Number: Not Specified

Lab Number:

L1714882

Report Date:

05/16/17

Alpha Sample ID

ample ID Client ID Matrix

Sample Location Collection Date/Time

Receive Date

L1714882-01

TRAIN WASH WATER BLANKS WATER

CRMF, 70R THIRD AVE., SOMMERVILLE, MA

05/08/17 14:05

05/09/17



Project Name:TRAIN WASH SAMPLE BLANKSLab Number:L1714882Project Number:Not SpecifiedReport Date:05/16/17

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.



Project Name:TRAIN WASH SAMPLE BLANKSLab Number:L1714882Project Number:Not SpecifiedReport Date:05/16/17

Case Narrative (continued)

Sample Receipt

L1714882-01: The sample was received in an inappropriate container for the Total Mercury analysis by Method 1631E. The analysis was canceled at the client's request.

The analysis of Hexavalent Chromium was received by the laboratory with the method required holding time exceeded and was canceled at the client's request.

Volatile Organics by Method 624

L1714882-01: The surrogate recovery for pentafluorobenzene (121%), fluorobenzene (125%) and 4-bromofluorobenzene (148%) is outside the acceptance criteria; however, since the sample was non-detect for all target analytes associated with these surrogates, re-analysis was not required.

Semivolatile Organics

L1714882-01: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

WG1001842: A Laboratory Duplicate was prepared with the sample batch, however, the native sample was not available for reporting; therefore, the laboratory duplicate results could not be reported.

Solids, Total Suspended

WG1001870: A laboratory duplicate could not be performed due to insufficient sample volume available for analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

- Amita Naik

Authorized Signature:

Title: Technical Director/Representative

Nails

ALPHA

Date: 05/16/17

ORGANICS



VOLATILES



Project Name: Lab Number: TRAIN WASH SAMPLE BLANKS L1714882

Project Number: Report Date: Not Specified 05/16/17

SAMPLE RESULTS

Lab ID: L1714882-01 Date Collected: 05/08/17 14:05

Client ID: Date Received: TRAIN WASH WATER BLANKS 05/09/17

Sample Location: CRMF, 70R THIRD AVE., SOMMERVILLE, MA Field Prep: Not Specified

Matrix: Water Analytical Method: 5,624

Analytical Date: 05/11/17 00:49

Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Westborough	Lab						
Benzene	ND		ug/l	1.0		1	
Acrolein ¹	ND		ug/l	8.0		1	

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	121	Q	80-120
Fluorobenzene	125	Q	80-120
4-Bromofluorobenzene	148	Q	80-120



Project Name: TRAIN WASH SAMPLE BLANKS **Lab Number:** L1714882

Project Number: Not Specified Report Date: 05/16/17

Method Blank Analysis Batch Quality Control

Analytical Method: 5,624

Analytical Date: 05/10/17 17:32

Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL	
Volatile Organics by GC/MS -	Westborough Lab	for sampl	e(s): 01	Batch:	WG1002156-10	
Benzene	ND		ug/l	1.0		
Acrolein ¹	ND		ug/l	8.0		

		Acceptance	
Surrogate	%Recovery Qualifi	er Criteria	
Pentafluorobenzene	102	80-120	
Fluorobenzene	104	80-120	
4-Bromofluorobenzene	109	80-120	



Project Name: TRAIN WASH SAMPLE BLANKS

Lab Number: L1714882

Project Number: Not Specified Report Date: 05/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Volatile Organics by GC/MS - Westborough	Lab Associated	sample(s): 0	1 Batch: WG1	002156-9					
Benzene	110		-		84-116	-		30	
Acrolein ¹	75		-		40-160	-		30	

Surrogate	LCS %Recovery Qual	LCSD %Recovery	Acceptance Qual Criteria
Pentafluorobenzene	103		80-120
Fluorobenzene	104		80-120
4-Bromofluorobenzene	110		80-120



Project Name: TRAIN WASH SAMPLE BLANKS

Project Number: Not Specified

Lab Number:

L1714882

Report Date: 05/16/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery C	Recovery Qual Limits		RPD Qual Limits
Volatile Organics by GC/MS -	- Westborough	Lab Asso	ciated sample(s	s): 01 QC Ba	tch ID: W	G1002156	-6 QC Sample	: L1714707-02	Client ID:	: MS Sample
Benzene	ND	20	25	125	Q	-	-	84-116	-	30
Toluene	ND	20	24	120		-	-	83-121	-	30
Ethylbenzene	ND	20	29	145	Q	-	-	84-123	-	30
p/m-Xylene ¹	ND	40	55	138	Q	-	-	81-121	-	30
o-Xylene ¹	ND	20	27	135	Q	-	-	81-124	-	30
Methyl tert butyl ether ¹	ND	20	18	90		-	-	57-126	-	30

	MS	MSD	Acceptance
Surrogate	% Recovery Qualifier	% Recovery Qualifier	Criteria
4-Bromofluorobenzene	112		80-120
Fluorobenzene	105		80-120
Pentafluorobenzene	103		80-120



Lab Duplicate Analysis Batch Quality Control

Project Name: TRAIN WASH SAMPLE BLANKS

Project Number: Not Specified

Lab Number:

L1714882

Report Date: 05/16/17

Volatile Organies by GC/MS - Westborough Lab	Native Sample	Duplicate Sample	Units	RPD	Qual	Limits
volatile Organics by GC/MS - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG100	2156-5 QC Sa	mple: L171	4707-01	Client ID: DUP Sample
Benzene	ND	ND	ug/l	NC		30
Toluene	ND	ND	ug/l	NC		30
Ethylbenzene	ND	ND	ug/l	NC		30
p/m-Xylene ¹	ND	ND	ug/l	NC		30
o-Xylene ¹	ND	ND	ug/l	NC		30
Xylene (Total) ¹	ND	ND	ug/l	NC		30
Methyl tert butyl ether ¹	ND	ND	ug/l	NC		30

			Acceptance	
Surrogate	%Recovery Qualifie	er %Recovery Qualifi	er Criteria	
Pentafluorobenzene	100	98	80-120	
Fluorobenzene	102	100	80-120	
4-Bromofluorobenzene	104	105	80-120	



SEMIVOLATILES



05/16/17

05/09/17 22:14

05/09/17

Project Name: TRAIN WASH SAMPLE BLANKS Lab Number: L1714882

Project Number: Not Specified

SAMPLE RESULTS

Lab ID: L1714882-01 D Date Collected: 05/08/17 14:05

Client ID: TRAIN WASH WATER BLANKS

Sample Location: CRMF, 70R THIRD AVE., SOMMERVILLE, MA Field Prep: Not Specified

Extraction Method:EPA 625

Report Date:

Date Received:

Extraction Date:

Matrix: Water Analytical Method: 5,625

Analytical Date: 05/16/17 15:41

Analyst: RC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS	- Westborough Lab						
Bis(2-ethylhexyl)phthalate	ND		ug/l	6.0		2	
Butyl benzyl phthalate	ND		ug/l	10		2	
Di-n-butylphthalate	ND		ug/l	10		2	
Di-n-octylphthalate	ND		ug/l	10		2	
Diethyl phthalate	ND		ug/l	10		2	
Dimethyl phthalate	ND		ug/l	10		2	
Phenol	ND		ug/l	10		2	

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	70	21-120
Phenol-d6	40	10-120
Nitrobenzene-d5	67	23-120
2-Fluorobiphenyl	73	15-120
2,4,6-Tribromophenol	79	10-120
4-Terphenyl-d14	99	33-120



Extraction Method: EPA 625

L1714882

Project Name: TRAIN WASH SAMPLE BLANKS Lab Number:

Project Number: Not Specified Report Date: 05/16/17

Method Blank Analysis Batch Quality Control

Analytical Method: 5,625

Analytical Date: 05/11/17 00:40 Extraction Date: 05/09/17 22:14

Analyst: PS

Parameter	Result	Qualifier	Units		RL	MDL	
Semivolatile Organics by GC/MS -	Westboroug	h Lab for s	ample(s):	01	Batch:	WG1001842-1	
Bis(2-ethylhexyl)phthalate	ND		ug/l		3.0		
Butyl benzyl phthalate	ND		ug/l		5.0		
Di-n-butylphthalate	ND		ug/l		5.0		
Di-n-octylphthalate	ND		ug/l		5.0		
Diethyl phthalate	ND		ug/l		5.0		
Dimethyl phthalate	ND		ug/l		5.0		
Phenol	ND		ug/l		5.0		

Surrogate	%Recovery Qual	Acceptance ifier Criteria
2-Fluorophenol	57	21-120
Phenol-d6	42	10-120
Nitrobenzene-d5	84	23-120
2-Fluorobiphenyl	81	15-120
2,4,6-Tribromophenol	74	10-120
4-Terphenyl-d14	95	33-120



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arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
emivolatile Organics by GC/MS - Westborou	ugh Lab Assoc	iated sample(s	s): 01 Batch:	WG1001842	-2			
Acenaphthene	94		-		47-145	-		30
1,2,4-Trichlorobenzene	84		-		44-142	-		30
Hexachlorobenzene	99		-		1-152	-		30
Bis(2-chloroethyl)ether	90		-		12-158	-		30
2-Chloronaphthalene	94		-		60-118	-		30
3,3'-Dichlorobenzidine	30		-		1-262	-		30
2,4-Dinitrotoluene	113		-		39-139	-		30
2,6-Dinitrotoluene	110		-		50-158	-		30
Fluoranthene	98		-		26-137	-		30
4-Chlorophenyl phenyl ether	97		-		25-158	-		30
4-Bromophenyl phenyl ether ¹	102		-		53-127	-		30
Bis(2-chloroisopropyl)ether	87		-		36-166	-		30
Bis(2-chloroethoxy)methane	97		-		33-184	-		30
Hexachlorobutadiene	81		-		24-116	-		30
Hexachloroethane	77		-		40-113	-		30
Isophorone	95		-		21-196	-		30
Naphthalene	87		-		21-133	-		30
Nitrobenzene	93		-		35-180	-		30
n-Nitrosodi-n-propylamine	92		-		1-230	-		30
Bis(2-Ethylhexyl)phthalate	106		-		8-158	-		30
Butyl benzyl phthalate	98		-		1-152	-		30
Di-n-butylphthalate	102		-		1-118	-		30
Di-n-octylphthalate	98		-		4-146	-		30



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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPI Qual Lim	
Semivolatile Organics by GC/MS - Westboro	ough Lab Assoc	ated sample(s)	: 01 Batch:	WG1001842	2-2			
Diethyl phthalate	99				1-114	-	30	
Dimethyl phthalate	99		-		1-112	-	30	
Benzo(a)anthracene	97		-		33-143	-	30	
Benzo(a)pyrene	96		-		17-163	-	30	
Benzo(b)fluoranthene	97		-		24-159	-	30	
Benzo(k)fluoranthene	101		-		11-162	-	30	
Chrysene	98		-		17-168	-	30	
Acenaphthylene	97		-		33-145	-	30	
Anthracene	96		-		27-133	-	30	
Benzo(ghi)perylene	104		-		1-219	-	30	
Fluorene	98		-		59-121	-	30	
Phenanthrene	95		-		54-120	-	30	
Dibenzo(a,h)anthracene	105		-		1-227	-	30	
Indeno(1,2,3-cd)Pyrene	103		-		1-171	-	30	
Pyrene	97		-		52-115	-	30	
2,4,6-Trichlorophenol	102		-		37-144	-	30	
P-Chloro-M-Cresol ¹	97		-		22-147	-	30	
2-Chlorophenol	90		-		23-134	-	30	
2,4-Dichlorophenol	100		-		39-135	-	30	
2,4-Dimethylphenol	85		-		32-119	-	30	
2-Nitrophenol	102		-		29-182	-	30	
4-Nitrophenol	66		-		1-132	-	30	
2,4-Dinitrophenol	94		-		1-191	-	30	



Project Name: TRAIN WASH SAMPLE BLANKS

Lab Number:

L1714882

Project Number: Not Specified

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<u>Pa</u>	rameter	LCS %Recovery	Qual	LCS %Reco		Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Se	mivolatile Organics by GC/MS - Westboro	ugh Lab Assoc	iated sample(s):	: 01 E	Batch:	WG1001842-2					
	4,6-Dinitro-o-cresol ¹	89		-			1-181	-		30	
	Pentachlorophenol	100		-			14-176	-		30	
	Phenol	53		-			5-112	-		30	

	LCS	LCSD	Acceptance
Surrogate	%Recovery Qual	%Recovery Qual	Criteria
2-Fluorophenol	61		21-120
Phenol-d6	45		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	86		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	87		33-120

Project Name: TRAIN WASH SAMPLE BLANKS

Project Number: Not Specified

Lab Number:

L1714882

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	/ Qual	MSD Found	MSD %Recovery	Recovery Qual Limits	RPD Qua	RPD I Limits
Semivolatile Organics by GO	C/MS - Westbor	ough Lab	Associated sa	ample(s): 01	QC Batch I	D: WG100	1842-3 QC	Sample: L1714674-	01 Client ID:	: MS Sample
Acenaphthene	ND	40	36	90		-	-	47-145	-	30
1,2,4-Trichlorobenzene	ND	40	33	83		-	-	44-142	-	30
Hexachlorobenzene	ND	40	39	98		-	-	1-152	-	30
Bis(2-chloroethyl)ether	ND	40	34	85		-	-	12-158	-	30
2-Chloronaphthalene	ND	40	37	93		-	-	60-118	-	30
3,3'-Dichlorobenzidine	ND	80	ND	0	Q	-	-	1-262	-	30
2,4-Dinitrotoluene	ND	40	45	110		-	-	39-139	-	30
2,6-Dinitrotoluene	ND	40	45	110		-	-	50-158	-	30
Fluoranthene	ND	40	39	98		-	-	26-137	-	30
4-Chlorophenyl phenyl ether	ND	40	38	95		-	-	25-158	-	30
4-Bromophenyl phenyl ether ¹	ND	40	41	100		-	-	53-127	-	30
Bis(2-chloroisopropyl)ether	ND	40	33	83		-	-	36-166	-	30
Bis(2-chloroethoxy)methane	ND	40	37	93		-	-	33-184	-	30
Hexachlorobutadiene	ND	40	33	83		-	-	24-116	-	30
Hexachloroethane	ND	40	31	78		-	-	40-113	-	30
sophorone	ND	40	37	93		-	-	21-196	-	30
Naphthalene	ND	40	35	88		-	-	21-133	-	30
Nitrobenzene	ND	40	38	95		-	-	35-180	-	30
n-Nitrosodi-n-propylamine	ND	40	35	88		-	-	1-230	-	30
Bis(2-Ethylhexyl)phthalate	ND	40	44	110		-	-	8-158	-	30
Butyl benzyl phthalate	ND	40	41	100		-	-	1-152	-	30
Di-n-butylphthalate	ND	40	42	110		-	-	1-118	-	30
Di-n-octylphthalate	ND	40	42	110		-	-	4-146	-	30
Diethyl phthalate	ND	40	39	98		-	-	1-114	-	30

Project Name: TRAIN WASH SAMPLE BLANKS

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Lab Number:

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Parameter	Native Sample	MS Added	MS Found	MS %Recovery	/ Qual	MSD Found	MSD %Recove	ery Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by G0	C/MS - Westbor	ough Lab	Associated sa	mple(s): 01	QC Batch II	D: WG100	1842-3 C	C Sample	: L1714674-0	01 Clie	ent ID: N	/IS Sample
Dimethyl phthalate	ND	40	39	98		-	-		1-112	-		30
Benzo(a)anthracene	ND	40	38	95		-	-		33-143	-		30
Benzo(a)pyrene	ND	40	36	90		-	-		17-163	-		30
Benzo(b)fluoranthene	ND	40	40	100		-	-		24-159	-		30
Benzo(k)fluoranthene	ND	40	38	95		-	-		11-162	-		30
Chrysene	ND	40	39	98		-	-		17-168	-		30
Acenaphthylene	ND	40	37	93		-	-		33-145	-		30
Anthracene	ND	40	36	90		-	-		27-133	-		30
Benzo(ghi)perylene	ND	40	40	100		-	-		1-219	-		30
Fluorene	ND	40	38	95		-	-		59-121	-		30
Phenanthrene	ND	40	37	93		-	-		54-120	-		30
Dibenzo(a,h)anthracene	ND	40	41	100		-	-		1-227	-		30
Indeno(1,2,3-cd)Pyrene	ND	40	40	100		-	-		1-171	-		30
Pyrene	ND	40	38	95		-	-		52-115	-		30
2,4,6-Trichlorophenol	ND	40	40	100		-	-		37-144	-		30
P-Chloro-M-Cresol ¹	ND	40	38	95		-	-		22-147	-		30
2-Chlorophenol	ND	40	34	85		-	-		23-134	-		30
2,4-Dichlorophenol	ND	40	39	98		-	-		39-135	-		30
2,4-Dimethylphenol	ND	40	15	38		-	-		32-119	-		30
2-Nitrophenol	ND	40	41	100		-	-		29-182	-		30
4-Nitrophenol	ND	40	29	73		-	-		1-132	-		30
2,4-Dinitrophenol	ND	40	44	110		-	-		1-191	-		30
4,6-Dinitro-o-cresol1	ND	40	41	100		-	-		1-181	-		30
Pentachlorophenol	ND	40	43	110		-	-		14-176	-		30

Project Name: TRAIN WASH SAMPLE BLANKS

Project Number: Not Specified

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L1714882

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	Native	MS	MS	MS		MSD	MSE)	Recovery		RPD
Parameter	Sample	Added	Found	%Recover	y Qual	Found	%Reco	very Qual	Limits	RPD Qu	al Limits
Semivolatile Organics by GC/M	S - Westbor	ough Lab	Associated sam	nple(s): 01	QC Batch II	D: WG100	1842-3	QC Sample	: L1714674-0	1 Client II	D: MS Sample
Phenol	ND	40	20	50		-	-		5-112	-	30

	MS	MSD	Acceptance	
Surrogate	% Recovery Qualifier	% Recovery Qualifier	Criteria	
2,4,6-Tribromophenol	88		10-120	
2-Fluorobiphenyl	81		15-120	
2-Fluorophenol	57		21-120	
4-Terphenyl-d14	85		33-120	
Nitrobenzene-d5	77		23-120	
Phenol-d6	45		10-120	

METALS



Project Name: TRAIN WASH SAMPLE BLANKS Lab Number: L1714882

Project Number: Not Specified Report Date: 05/16/17

SAMPLE RESULTS

Lab ID: L1714882-01 Date Collected: 05/08/17 14:05

Client ID: TRAIN WASH WATER BLANKS Date Received: 05/09/17
Sample Location: CRMF, 70R THIRD AVE., SOMMERVI Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Man	sfield Lab										
Cadmium, Total	ND		mg/l	0.00100		1	05/11/17 11:3	6 05/12/17 10:04	EPA 3005A	3,200.8	AM
Lead, Total	ND		mg/l	0.00100		1	05/11/17 11:3	6 05/12/17 10:04	EPA 3005A	3,200.8	AM
Zinc, Total	ND		mg/l	0.01000		1	05/11/17 11:3	6 05/12/17 10:04	EPA 3005A	3,200.8	AM



Project Name: TRAIN WASH SAMPLE BLANKS **Lab Number:** L1714882

Project Number: Not Specified Report Date: 05/16/17

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytica Method	l Analyst
Total Metals - Mans	sfield Lab for sample(s):	01 Bato	h: WG10	002425	-1				
Cadmium, Total	ND	mg/l	0.00100		1	05/11/17 11:36	05/12/17 09:13	3,200.8	AM
Lead, Total	ND	mg/l	0.00100		1	05/11/17 11:36	05/12/17 09:13	3,200.8	AM
Zinc, Total	ND	mg/l	0.01000		1	05/11/17 11:36	05/12/17 09:13	3,200.8	AM

Prep Information

Digestion Method: EPA 3005A



Project Name: TRAIN WASH SAMPLE BLANKS

Project Number: Not Specified Lab Number: L1714882

Report Date: 05/16/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sam	ple(s): 01 Batch: \	WG1002425	5-2					
Cadmium, Total	112		-		85-115	-		
Lead, Total	107		-		85-115	-		
Zinc, Total	106		-		85-115	-		



Project Name: TRAIN WASH SAMPLE BLANKS

Project Number: Not Specified

Lab Number:

L1714882

Report Date: 05/16/17

Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Associated sam	nple(s): 01	QC Batch II	D: WG1002425	-3 (QC Sample:	: L1715042-01	Clier	nt ID: MS Sa	ample		
ND	0.051	0.05366	105		-	-		70-130	-		20
0.0018	0.51	0.5301	104		-	-		70-130	-		20
0.1004	0.5	0.6007	100		-	-		70-130	-		20
Associated sam	nple(s): 01	QC Batch II	D: WG1002425	-5 (QC Sample:	: L1715058-01	Clier	nt ID: MS Sa	ample		
ND	0.051	0.05675	111		-	-		70-130	-		20
ND	0.51	0.5306	104		-	-		70-130	-		20
ND	0.5	0.5221	104		-	-		70-130	-		20
	Sample Associated sam ND 0.0018 0.1004 Associated sam ND ND	Sample Added Associated sample(s): 01 ND 0.051 0.0018 0.51 0.1004 0.5 Associated sample(s): 01 ND 0.051 ND 0.51	Sample Added Found Associated sample(s): 01 QC Batch II ND 0.051 0.05366 0.0018 0.51 0.5301 0.1004 0.5 0.6007 Associated sample(s): 01 QC Batch II ND 0.051 0.05675 ND 0.51 0.5306	Sample Added Found %Recovery Associated sample(s): 01 QC Batch ID: WG1002425 ND 0.051 0.05366 105 0.0018 0.51 0.5301 104 0.1004 0.5 0.6007 100 Associated sample(s): 01 QC Batch ID: WG1002425 ND 0.051 0.05675 111 ND 0.51 0.5306 104	Sample Added Found %Recovery Qual Associated sample(s): 01 QC Batch ID: WG1002425-3 C ND 0.051 0.05366 105 0.0018 0.51 0.5301 104 0.1004 0.5 0.6007 100 Associated sample(s): 01 QC Batch ID: WG1002425-5 C ND 0.051 0.05675 111 ND 0.51 0.5306 104	Sample Added Found %Recovery Qual Found Associated sample(s): 01 QC Batch ID: WG1002425-3 QC Sample ND 0.051 0.05366 105 - 0.0018 0.51 0.5301 104 - 0.1004 0.5 0.6007 100 - Associated sample(s): 01 QC Batch ID: WG1002425-5 QC Sample ND 0.051 0.05675 111 - ND 0.51 0.5306 104 -	Sample Added Found %Recovery Qual Found %Recovery Associated sample(s): 01 QC Batch ID: WG1002425-3 QC Sample: L1715042-01 ND 0.051 0.05366 105 - - 0.0018 0.51 0.5301 104 - - 0.1004 0.5 0.6007 100 - - Associated sample(s): 01 QC Batch ID: WG1002425-5 QC Sample: L1715058-01 ND 0.051 0.05675 111 - - ND 0.51 0.5306 104 - -	Sample Added Found %Recovery Qual Found %Recovery Qual Associated sample(s): 01 QC Batch ID: WG1002425-3 QC Sample: L1715042-01 Client ND 0.051 0.05366 105 - - 0.0018 0.51 0.5301 104 - - 0.1004 0.5 0.6007 100 - - Associated sample(s): 01 QC Batch ID: WG1002425-5 QC Sample: L1715058-01 Client ND 0.051 0.05675 111 - - ND 0.51 0.5306 104 - -	Sample Added Found %Recovery Qual Found %Recovery Qual Limits Associated sample(s): 01 QC Batch ID: WG1002425-3 QC Sample: L1715042-01 Client ID: MS Sample ND 0.051 0.05366 105 - - - 70-130 0.0018 0.51 0.5301 104 - - - 70-130 0.1004 0.5 0.6007 100 - - - 70-130 Associated sample(s): 01 QC Batch ID: WG1002425-5 QC Sample: L1715058-01 Client ID: MS Sample ND 0.051 0.05675 111 - - 70-130 ND 0.51 0.5306 104 - - - 70-130	Sample Added Found %Recovery Qual Found %Recovery Qual Limits RPD Associated sample(s): 01 QC Batch ID: WG1002425-3 QC Sample: L1715042-01 Client ID: MS Sample ND 0.051 0.05366 105 - - - 70-130 - 0.0018 0.51 0.5301 104 - - - 70-130 - 0.1004 0.5 0.6007 100 - - - 70-130 - Associated sample(s): 01 QC Batch ID: WG1002425-5 QC Sample: L1715058-01 Client ID: MS Sample ND 0.051 0.05675 111 - - 70-130 - ND 0.51 0.5306 104 - - - 70-130 -	Sample Added Found %Recovery Qual Found %Recovery Qual Limits RPD Qual Associated sample(s): 01 QC Batch ID: WG1002425-3 QC Sample: L1715042-01 Client ID: MS Sample -

Lab Duplicate Analysis Batch Quality Control

Project Name: TRAIN WASH SAMPLE BLANKS

Project Number: Not Specified

Lab Number:

L1714882

Report Date:

Parameter	Native Sample Dup	licate Sample Units	RPD Q	Qual RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01	QC Batch ID: WG1002425-4	QC Sample: L1715042-01	Client ID: DUP	Sample
Lead, Total	0.0018	0.00183 mg/l	1	20
Total Metals - Mansfield Lab Associated sample(s): 01	QC Batch ID: WG1002425-6	QC Sample: L1715058-01	Client ID: DUP	Sample
Cadmium, Total	ND	ND mg/l	NC	20
Lead, Total	ND	ND mg/l	NC	20
Zinc, Total	ND	ND mg/l	NC	20

INORGANICS & MISCELLANEOUS



05/08/17 14:05

Date Collected:

Project Name: TRAIN WASH SAMPLE BLANKS Lab Number: L1714882

Project Number: Not Specified Report Date: 05/16/17

SAMPLE RESULTS

Lab ID: L1714882-01

Client ID: TRAIN WASH WATER BLANKS Date Received: 05/09/17
Sample Location: CRMF, 70R THIRD AVE., SOMMERVI Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Wes	tborough La	b								
Solids, Total Suspended	ND		mg/l	1.0	NA	1	-	05/10/17 05:36	121,2540D	VB
Oil & Grease, Hem-Grav	ND		mg/l	5.2		1.3	05/11/17 17:00	05/11/17 18:00	74,1664A	ML



Project Name: TRAIN WASH SAMPLE BLANKS Lab Number: L1714882

Project Number: Not Specified Report Date: 05/16/17

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lab for sam	nple(s): 01	Batch:	WG10	001870-1				
Solids, Total Suspended	ND	mg/l	1.0	NA	1	-	05/10/17 05:36	121,2540D	VB
General Chemistry - W	estborough Lab for sam	nple(s): 01	Batch:	WG10	002623-1				
Oil & Grease, Hem-Grav	ND	mg/l	4.0		1	05/11/17 17:00	05/11/17 18:00	74,1664A	ML



TRAIN WASH SAMPLE BLANKS

Lab Number:

L1714882

Project Number: Not Specified

Project Name:

Report Date:

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
General Chemistry - Westborough Lab	Associated sample(s):	01 B	atch: WG1002623-	2					
Oil & Grease, Hem-Grav	95		-		78-114	-		18	



Project Name: TRAIN WASH SAMPLE BLANKS

Project Number: Not Specified

Lab Number:

L1714882

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual Found	MSD I %Recovery G	Recovery Qual Limits	RPD Qı	RPD _{Ial} Limits
General Chemistry - Westborou	gh Lab Asso	ciated samp	le(s): 01	QC Batch ID: V	NG1002623-4	QC Sample: L171	4908-01 Client	ID: MS Sa	ımple
Oil & Grease, Hem-Grav	140	40.8	180	106		-	78-114	-	18



Lab Duplicate Analysis
Batch Quality Control

Lab Number: **Project Name:** TRAIN WASH SAMPLE BLANKS L1714882

05/16/17 **Project Number:** Not Specified Report Date:

Parameter	Native Sample	Duplicate Sam	ple Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Assoc	iated sample(s): 01 QC Batch ID:	WG1002623-3	QC Sample: L	1714908-01	Client ID:	DUP Sample
Oil & Grease, Hem-Grav	140	130	mg/l	7		18



Project Name: TRAIN WASH SAMPLE BLANKS

Lab Number: L1714882 Project Number: Not Specified **Report Date:** 05/16/17

Sample Receipt and Container Information

YES Were project specific reporting limits specified?

Cooler Information Custody Seal

Cooler

Α Absent

Container Info	rmation			Temp			
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1714882-01A	Vial Na2S2O3 preserved	Α	N/A	3.7	Υ	Absent	624(3)
L1714882-01B	Vial Na2S2O3 preserved	Α	N/A	3.7	Υ	Absent	624(3)
L1714882-01C	Vial Na2S2O3 preserved	Α	N/A	3.7	Υ	Absent	624(3)
L1714882-01D	Plastic 250ml unpreserved	Α	7	3.7	Υ	Absent	HOLD-WETCHEM()
L1714882-01E	Plastic 250ml HNO3 preserved	Α	<2	3.7	Y	Absent	CD-2008T(180),ZN- 2008T(180),HOLD- METAL(180),PB-2008T(180)
L1714882-01F	Amber 1000ml HCl preserved	Α	N/A	3.7	Υ	Absent	OG-1664(28)
L1714882-01G	Amber 1000ml HCl preserved	Α	N/A	3.7	Υ	Absent	OG-1664(28)
L1714882-01H	Plastic 950ml unpreserved	Α	7	3.7	Υ	Absent	TSS-2540-LOW(7)
L1714882-01J	Amber 1000ml Na2S2O3	Α	7	3.7	Υ	Absent	625(7)
L1714882-01K	Amber 1000ml Na2S2O3	Α	7	3.7	Υ	Absent	625(7)



Project Name:TRAIN WASH SAMPLE BLANKSLab Number:L1714882Project Number:Not SpecifiedReport Date:05/16/17

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated

values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis

of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any

adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for

which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's

reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL

includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less

than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the

values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the

associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound

list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a "Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Report Format: Data Usability Report



Project Name:TRAIN WASH SAMPLE BLANKSLab Number:L1714882Project Number:Not SpecifiedReport Date:05/16/17

Data Qualifiers

- reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- **R** Analytical results are from sample re-analysis.
- RE Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.
- J Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- **ND** Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report



Project Name:TRAIN WASH SAMPLE BLANKSLab Number:L1714882Project Number:Not SpecifiedReport Date:05/16/17

REFERENCES

- Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.
- Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).
- Method 1664,Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

ID No.:17873 Revision 10

Page 1 of 1

Published Date: 1/16/2017 11:00:05 AM

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 300: DW: Bromide

EPA 6860: NPW and SCM: Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

EPA 9012B: NPW: Total Cyanide EPA 9050A: NPW: Specific Conductance

SM3500: NPW: Ferrous Iron

SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.

SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility

SM 2540D: TSS EPA 3005A NPW

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, SM4500NO3-F, EPA 353.2: Nitrate-N, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E.

Mansfield Facility:

Drinking Water

EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. EPA 200.8: Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. EPA 245.1 Hg.

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Document Type: Form

Pre-Qualtrax Document ID: 08-113

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Contains T																					
Container Type P= Plastic A= Amber glass	Preservative A= None B≃ HCI					Contai	ner Type														
V= Vial G= Glass B= Bacteria cup	C= HNO ₃ D= H ₂ SO ₄ E= NaOH					Pre	servative														\top
C= Cube O= Other E= Encore	F= MeOH G= NaHSO4	on: I	Relinquis	shed By:		Date	/Time	,-	10	Recei	ved By	0	AS		Date			Allean	onles sub-	mitted are sub-	
D= BOD Bottle	H = Na ₂ S ₂ O ₃ I= Ascorbic Acid J = NH ₄ CI	/selye)	has a	o circo		5/9/1	1102		3	Me	6	1	AZ	_ /	9/17	110		Alpha's	Terms ar	nitted are subje nd Conditions.	CUTO
2200 38 of 42	K= Zn Acetate O= Other					1911	1070	1			_	Vien	10	- 121	7/17	10			verse side 0: 01-01 (rev	12-Mar-2012)	



April 28, 2017

Marian Rambelle CDW Consultants, Inc.

40 Speen Street

Suite 301

Framingham, MA 01701

Subject: Train Wash Water

Alpha Quote Number: 2910

Dear Marian,

Alpha Analytical is pleased to provide the following analytical cost proposal. A table with the project pricing is attached. Thank you for this opportunity. If you have any questions, or concerns, you may reach me directly at 508-439-5157.

Sincerely yours,

Dave Sanford Project Manager

Attachment



Date April 28, 2017

Subject Train Wash Water

Quote # 2910

WATER				des chaire and an and an analysis of the second and
PARAMETER	METHOD	# OF SAMPLES	UNIT RATE	EXTENDED TOTAL
VOA EPA 624, Acrolein and Benzene	624	က	\$137.00	\$411.00
ABN EPA 625, Phenol and Phthalates	625	က	\$236.00	\$708.00
Total Mercury (AF)	1631E	ന	\$110.00	\$330.00
Total Cadmium - EPA 200.8	200.8	က	\$12.00	836.00
Hexavalent Chromium - EPA 7196	7196A	m	\$20.00	00 089
Oil & Grease-Hexane Method - EPA 1664	1664A	ಣ	\$110.00	\$330.00
Total Lead - EPA 200.8	200.8	ന	\$12.00	2000
Total Suspended Solids - SM 2540 (low 2540D level)	, 2540D	n 60	\$19.00	\$57.00
Total Zinc - EPA 200.8	200.8	ო	\$12.00	\$36.00
			TOTAL	\$2004.00
		Toronto State Control of the Control	The same of the sa	

 Laboratory method blanks, laboratory control spikes (LCS/LCSD) are analyzed at no additional cost. If trip blanks, or other field QC such as matrix spikes (MS/MSD), duplicates, or field blanks/equipment blanks are required, they are billed at the unit prices

\$2004.00

PROJECT TOTAL

Samples are disposed 21 days after invoicing unless prior arrangements have been made. Samples that require storage beyond 21 days will be billed a storage fee of \$5.00/sample/month for extended and monitored frozen storage.
 Bottles, preservatives, and coolers will be provided at no additional cost.

Federal, QAPP, or other project criteria do not represent a guarantee. Actual field sample results will differ depending on site-specific field conditions and various factors such as high moisture, high levels of sulfur and/or organic matter, and 4. Laboratory reporting limits (RLs) are based on clean, 100% dry reference material. Lab RLs as compared to State, high concentrations of non-target and/or target analytes.

Samples cannot be logged in and turnaround time clock will not start until any ambiguities are resolved. Surcharge fees will be applied when response is not received within 24 hours and original requested turnaround time is still

Any samples that are received on hold and are not analyzed will incur a \$50 fee per batch of samples. (Batch defined as up to 20 samples.)



Date April 28, 2017

Subject Train Wash Water

Quote # 2910

7. Turnaround time is an estimate and may vary depending on laboratory capacity at the time of sample receipt. Alpha Analytical reserves the right to revise the turnaround time accordingly, should the scope and/or schedule of the project change.

Page 3



Terms & Conditions

(Sample Delivery Acceptance). The Client is required to respond to questions about the order within one business day of request by ALPHA. If In the absence of a written agreement to the contrary, this order constitutes an acceptance by the Client of Alpha Analytical, Inc. (ALPHA)'s days ALPHA was delayed in receiving a response from the Client. ALPHA reserves the right, to refuse or revoke Sample Delivery Acceptance for any sample which in the sole judgment of ALPHA: a) is unsuitable volume; b) may pose a risk or become unsuitable for handling, transport or processing for any health, safety, environmental or any other reason; c) holding times cannot be met due to passage of offer to do business under these Terms and Conditions, and agrees to be bound by these conditions. Any terms and conditions from Client's Any provisions of Terms and Conditions held in violation of any law or ordinance shall be stricken, and all remaining provisions the Client does not respond within one business day, the turnaround time for any deliverables will be extended by the same number of business shall continue valid and binding. This order shall not be valid unless it contains sufficient specifications to enable ALPHA to carry out the that do not conform to the terms and conditions contained herein shall be deemed invalid and unenforceable, unless accepted in writing by Client's requirements. Samples must be accompanied by: a) adequate instruction as to the quantity and type of analysis requested, and b) turnaround times, calculated from the point in time when ALPHA has determined that it can proceed with the defined work to be done reporting and billing address information. Upon timely delivery of samples, ALPHA will use its best efforts to meet mutually agreed more than 48 hours from the time of sampling or ½ the holding time for the requested test, whichever is less.

agreed to in writing. All overdue payments are subject to an interest and service charge of one and one half percent (1.5%) (Or the maximum rate permissible by law, whichever is lesser) per month or portion thereof from the due date until the date of payment. All fees are charged or invoices where required by law. Payment in advance is required for all Clients except those whose credit has been established with ALPHA. agreement from the third party that acknowledges and accepts payment responsibility. ALPHA may suspend work and withhold delivery of performed under this agreement shall only become the property of the Client upon receipt in full by ALPHA of payment for the entire Order. data under this order at any time in the event that the Client fails to make timely payment of its invoices. Client shall be responsible for all For Clients with approved credit, payment terms are Net 30 days from the date of the invoice by ALPHA unless other payment terms are Client agrees to pay for all applicable charges to process this order. Prices do not include sales tax. Applicable sales tax will be added to billed directly to the Client. The billing of third parties will not be accepted without a prepayment from the third party or a signed credit costs and expenses of collection including reasonable attorney's fees. Data or information provided to ALPHA or generated by services

requires it. ALPHA reserves the right to deviate from these methodologies as necessary or appropriate, based on the reasonable judgment of ALPHA has implemented these the event that samples arrive without a prior agreement on a QAPP, ALPHA will proceed with analyses under its standard Quality Manuals methods in its Laboratory Quality Manuals and referenced Standard Operating Procedures where the nature or composition of the samples Deviations, if any, will be made on a basis consistent with the recognized standards of the industry and/or ALPHA's Laboratory Quality Manuals. Client may request that ALPHA perform according to a mutually agreed upon Quality Assurance Project Plan (QAPP). then in effect, and ALPHA will not be responsible for any re-sampling or other changes if work must be repeated to comply with the ALPHA will use analytical methodologies which are in substantial conformity with published test methods.

ALPHA's liability for any and all causes of action arising hereunder, whether based in contract, tort, warranty, negligence or otherwise, shall be limited to the lesser amount of compensation for the services performed or \$100.00. All claims, including those for negligence, shall be deemed waived unless suit therein is filed within one year after ALPHA's completion of the services. Under no circumstances, whether arising in contract, tort (including negligence), or otherwise, shall ALPHA be responsible for loss of use, loss of profits or for any special, indirect, incidental or consequential damages occasioned by the services performed by application or use of the reports prepared.

In no event shall ALPHA have any responsibility or liability to the Client for any failure or delay in performance by ALPHA which results, directly or indirectly in whole or in part, from any cause or circumstance beyond the reasonable control of ALPHA.

ALPHA shall dispose of the Client's samples 21 calendar days after the analytical report is issued, unless instructed to store them for an alternate period of time or return such samples to the Client. The return of samples will be at the Client's own expense.



145 Flanders Road, Westborough, Massachusetts 01581 • 508-896-9220 - www.ziphalab.com

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